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9/29/95

SITE ASSESSMENT REPORT
FOR
GENERAL IRON
CHICAGO, COOK COUNTY, ILLINOIS
TDD No. T05-9501-009
PAN: EIL0857SAA

September 29, 1995

Prepared for:
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency and Enforcement Response Branch
77 West Jackson Boulevard
Chicago, Illinois, 60604

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Thomas Kouris, TAT Leader

1. INTRODUCTION

United States Environmental Protection Agency (U.S. EPA) tasked the Ecology and Environment, Inc., (E & E) Technical Assistance Team (TAT) to assist the On-Scene Coordinator (OSC) in performing a site assessment at the General Iron (GI) site in Chicago, Illinois. The TAT was requested under Technical Direction Document (TDD) number T05-9501-009 to prepare and implement a health and safety plan, compile background information, conduct a site assessment, perform air monitoring, collect samples, document on-site activities, and evaluate threats to human health and the environment. The site assessment was conducted on February 22, 1995. All activities were coordinated under the authority of the U.S. EPA OSC Victor Ho.

2. SITE BACKGROUND

2.1 SITE DESCRIPTION

The GI site is located at 1909 N. Clifton Street, and 1066 W. North Avenue, in Chicago, Illinois (Figure 1). GI is an scrap metal recycling business located in a light industrial area. The North Branch of the Chicago River forms the western boundary of the site and Kingsbury Street forms the eastern border. In addition to the two principal yards GI also maintains operations at one additional yard, located at 1441 W. Magnolia, which is used as a rail loading facility for ferrous scrap.

The principle feature of the Clifton yard is the shredder, which is located north of the main office. The principle feature of the North Avenue yard is the "oscillator", which is housed inside a building located on North Avenue (Figure 2).

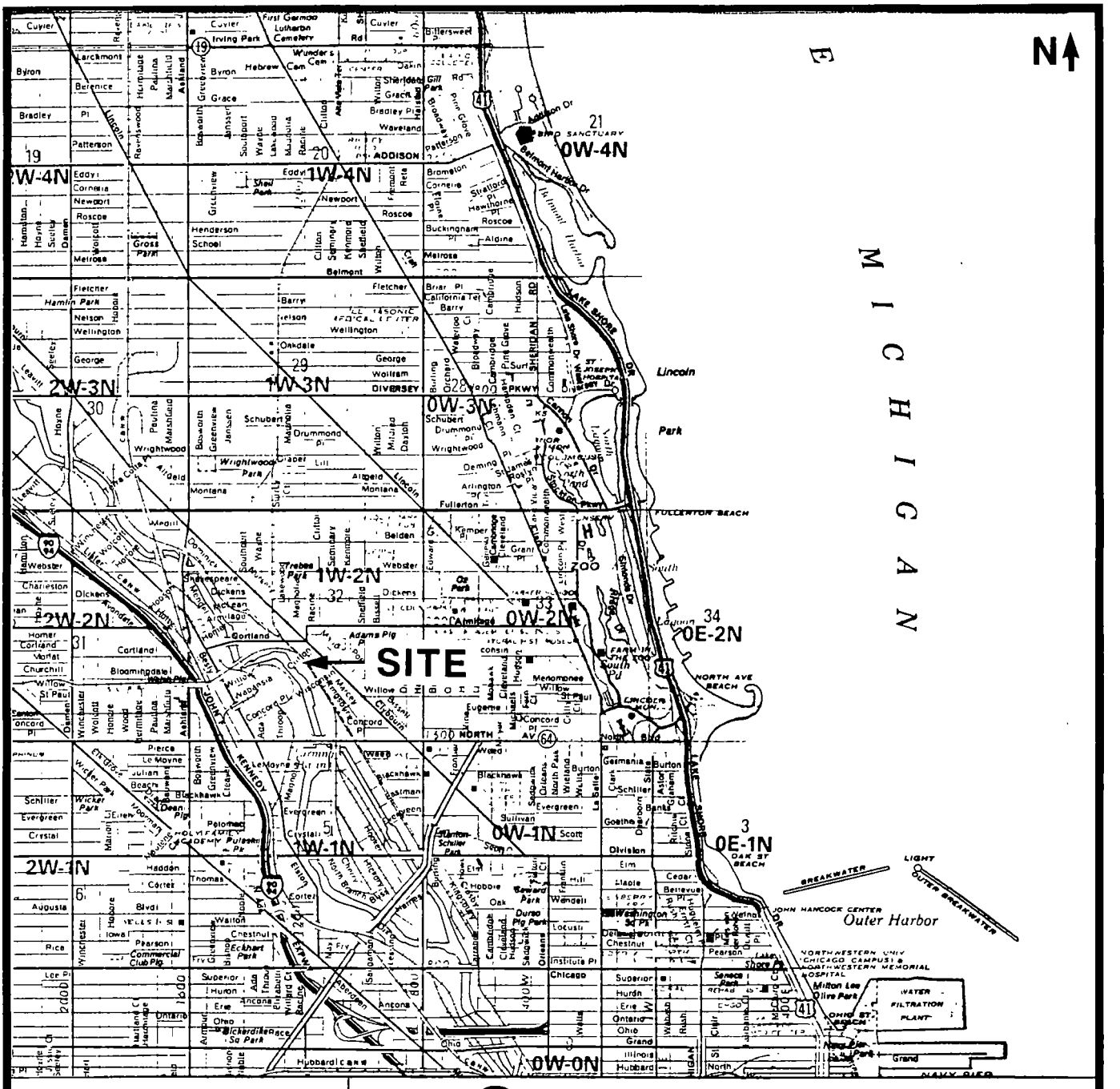
2.2 SITE HISTORY

GI is owned and operated by Nathan Rosenmutter. Mr. Adam Labkon is a grandson of Mr. Rosenmutter and assists in the daily operations of the facility.

GI purchases and receives scrap metal items for recycling. Although automobiles are specifically excluded, Mr. Labkon admitted that approximately five automobiles are shredded each year. "White goods" are accepted without inspection. The scrap items are fragmentized in a shredder and ferrous scrap is magnetically separated from non-ferrous scrap. Ferrous metal is transported by rail to a steel mill (Northwestern Steel and Wire). Non-ferrous metal is sold principally to the Huron-Valley Steel Co., Belleville, Michigan. The remaining non-metal scrap

is designated as "fines" and is separated into recyclable wastes and non-recyclable wastes designated for landfill disposal.

The North Avenue yard is located directly south of the Clifton Street yard. The purpose of the North Avenue yard is to separate the non-metal components generated in the Clifton Street yard into recyclable, non-recyclable, and waste destined for landfill disposal. The principle machinery used for separation is the "oscillator", which uses vibration to promote separation of small pieces generated by the shredder. Larger pieces are segregated manually. Approximately four truckloads of "fines" are generated daily and transported to a landfill site in Joliet for disposal.



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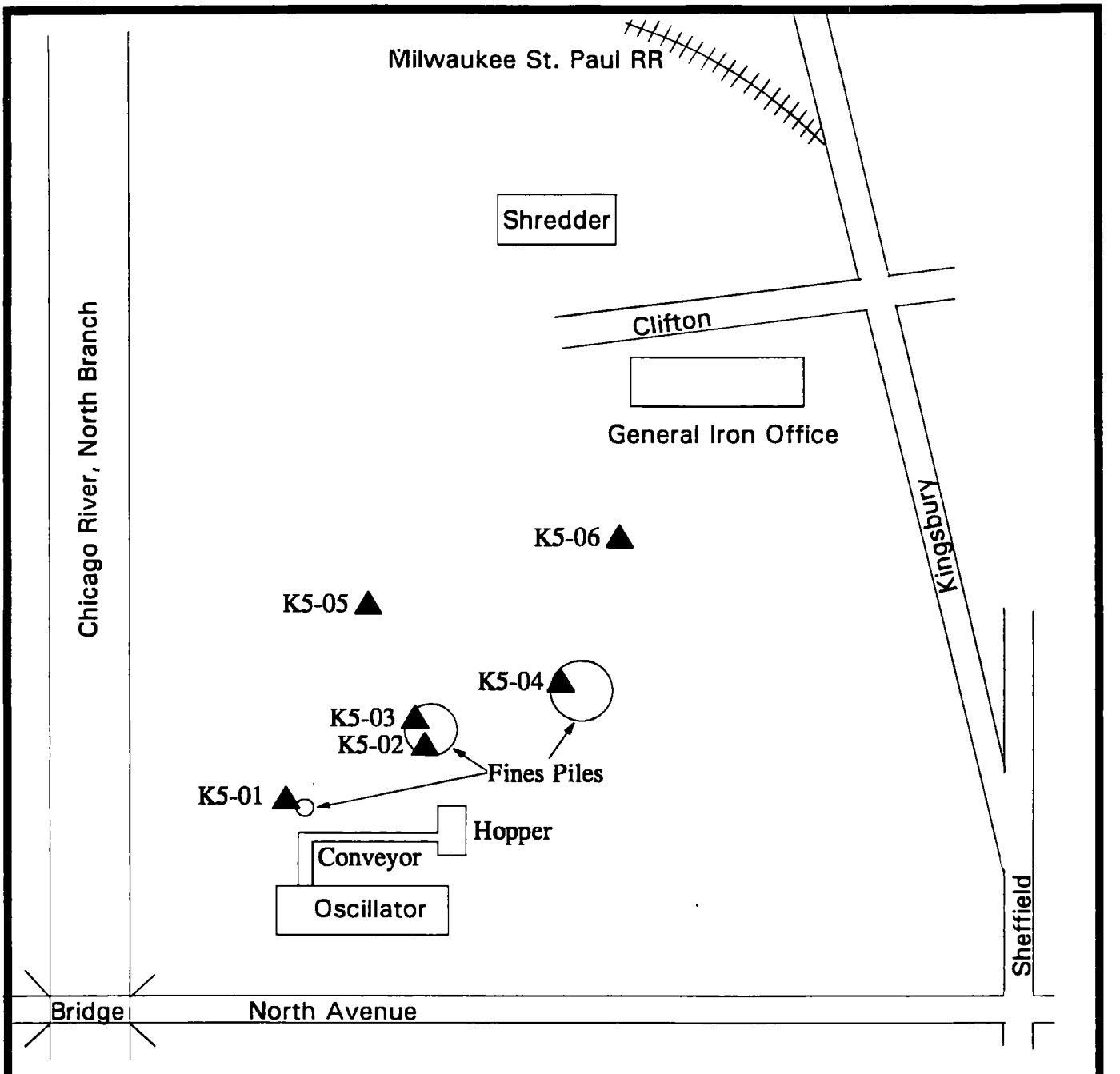
Technical Assistance Team
Region V
111 W. Jackson Blvd., Chicago, Illinois 60604

TITLE	Site Location Map	FIGURE # 1
SITE	General Iron	SCALE Not To Scale
CITY	Chicago STATE Illinois	PAN EIL0857SAA
SOURCE	Ecology and Environment, Inc.	DATE 1995
		REVISED



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TITLE: Sample Location Map	FIGURE #: 3
SITE: General Iron	SCALE: Not To Scale
CITY: Chicago STATE: Illinois	PAN: EIL0857SAA
SOURCE: Ecology and Environment, Inc.	DATE: 1995
	REVISED:

3 SITE ASSESSMENT

On February 22, 1995, at 0940 hours, TAT Members (TATMs) Tim Calloway and Dave Hendren met U.S. EPA OSC Victor Ho and Ken Zolnierczyk of the U.S. EPA Toxic Substances and Control Act (TSCA) division, at the General Iron office located at 1909 N. Clifton Street. In addition, Kenneth Savage of the Illinois EPA (IEPA) Emergency Response Unit was also present and joined the TAT and U.S. EPA personnel in a meeting with Adam Labkon of GI. Mr. Labkon identified himself as the grandson of the owner and founder of GI, Nathan Rosenmutter. Mr Labkon explained the overall operations of the facility and answered questions asked by the investigation team. The meeting concluded at 1050 hours, and the group began a site reconnaissance of the Clifton Street yard, guided by Mr. Labkon. Mr. Labkon showed the group the main yard and explained the operations of the shredder. At 1125 hours the site reconnaissance was completed and the group drove to the North Avenue yard located approximately 0.25 miles south of the Clifton Street yard. Again, the group was led by Mr. Labkon who explained the operations of the oscillator and related activity. The site reconnaissance of the North Avenue yard was completed at 1155 hours and the group prepared to collect samples.

It was decided by the group that samples would be collected for analyses for PCBs and TCLP metals. Samples would be submitted to the Illinois state laboratory for PCB analyses and to IEA of Schaumburg, Illinois, for analyses for TCLP metals. All samples were collected by the IEPA Savage who collected representative samples in a mixing bowl, performed thorough mixing, and divided the sampled material for each parameter. Samples from fines piles were collected from numerous locations

within each pile and mixed. A complete set of samples was also prepared for the use of GI, at the request of Mr. Labkon. All samples were collected from the North Avenue yard.

The first sample (K5-01) was collected at 1210 hours and was a composite sample collected from a small pile of fines adjacent to the oscillator conveyor. Sample K5-02 was a composite collected at 1215 hours from a fines pile located approximately 50 feet north of the conveyor. Sample K5-03 was collected from the middle of this pile, at 1225 hours. Sample K5-04 was collected at 1235 hours from a large fines pile located northeast of the Oscillator building. Sample K5-05 was a soil sample collected from the center of the yard at 1245 hours. Sample K5-06 was a soil sample collected at 1255 hours at a location northeast of where Sample K5-05 was collected.

Following sample collection the group returned to the GI office, where the samples were divided into three sets. One sample set was given to Mr. Labkon, one set was given to Kenneth Savage, and one set was given to TAT. The TATMs returned to the warehouse at 1415 hours, demobilized, and completed chain-of-custody form number 5-40848. The samples were submitted to IEA, Schaumburg, Illinois, for determination of TCLP metals.

4.0 ANALYTICAL RESULTS

The analytical results for samples collected at the site are provided in Table 4-1. All values for TCLP metals were below regulatory limits. PCBs were detected in each sample collected, ranging from 120 ug/g to 240 ug/g. The laboratory did not provide the identity of PCB mixtures that were found in the samples.

- **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;**

At the time of the site assessment all areas where sampling occurred were open to weather conditions. The physical nature of the fines (fluff) containing PCBs would allow airborne dispersion of this material during windy conditions. In addition, the proximity of the fluff piles to the Chicago River allow possible migration of PCB containing material to the river through water runoff and airborne dispersion.

6. SUMMARY

A removal action is warranted at the General Iron site based upon the threats defined in Section 5. Employees and clients of General Iron may be exposed to hazardous concentrations of PCBs. Finally, because the facility is adjacent to the North Branch of the Chicago River, the threat of migration of PCBs to the river exists.